



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,742	10/24/2006	Zvi Nitzan	12298/48503	2974
23838	7590	09/09/2008	EXAMINER	
KENYON & KENYON LLP			KALAFUT, STEPHEN J	
1500 K STREET N.W.				
SUITE 700			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			1795	
			MAIL DATE	DELIVERY MODE
			09/09/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/593,742	NITZAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Stephen J. Kalafut	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 17 June 2008.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 23-29 and 32-41 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 23-27 and 34 is/are allowed.  
 6) Claim(s) 28,29 and 35 is/are rejected.  
 7) Claim(s) 32,33 and 36-41 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 17 June 2008 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 28 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Akuto (US 4,889,777), for reasons of record.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akuto in view of Sielemann *et al.* (US 5,664,321).

This newly added claim differs from Akuto by reciting that the separator is a gel or polymer precipitate. Sielemann *et al.* disclose a gelled electrolyte made of sulfuric acid and a gelling agent (column 2, lines 40-57). Because this avoids some of the problems with liquid sulfuric acid electrolytes (column 2, line 61 through column 3, line 5), which is the type of electrolyte used by Akuto (column 3, lines 59-62), it would be obvious to use the gelled electrolyte of Sielemann *et al.* in the battery of Akuto.

Claims 23-27 and 34 are allowed. Claims 23-27 are allowed for reasons of record. Claim 34 is allowed because of the newly added limitations, specifically the electrolyte layer comprising two electrolyte solutions and an interfacial separator layer. These are not disclosed by the prior art.

Claims 32, 33 and 36-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims. The prior art does not disclose a cell with all the characteristics recited in claim 29, which also includes two electrolytes that are each disposed on a respective substrate, as recited in claim 32. Claims 33 and 36-41 depend from claim 32, and would likewise be objected to.

Applicant's arguments filed 17 June 2008 have been fully considered but they are not persuasive.

Applicants argue that Akuto does not disclose a self-formed separator or any ingredients in the electrolyte layer than can form a separator. This is not persuasive because the term “self-formed” does not require the separator to be formed of ingredients contained in the electrolyte. While there is no separator in the preferred embodiment of Akuto’s battery, his disclosure is not limited to just the preferred embodiment.

Applicant argues various characteristics of the self-formed separator that they allege are not possessed by the prior art. This is not persuasive because the term “self-formed” does not require that the separator be created *in situ* or in any particular place, nor implies any specific property at any specific degree.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/593,742  
Art Unit: 1795

Page 5

/Stephen J. Kalafut/  
Primary Examiner, Art Unit 1795